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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/614,744

Applicant(s)

HICKS ET AL.

Examiner

CHUCK HUYNH

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 7-54 and 56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7-54 and 56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/11/2008 has been entered.

Information Disclosure Statement

The information disclosure statements received on 7/29/2008 has been considered by Examiner.

Response to Arguments

Applicant's arguments with respect to all the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 1, 2, 4, 7-16, 19-21, 36-40, 43-46, and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohammed (US 6922559) in view of McIntosh et al. (US 2003/0139180; hereinafter McIntosh) in further view of Sashihara (US 20020157007).**

Regarding claim 1, Mohammed discloses a dual mode digital cordless handset configured for use in a system for providing voice and data services over a wired data network, the system having (Abstract; Col 2, lines 19-37):

a first wireless network (unregulated/unlicensed) including one or more wireless access points wired to the wired data network the wireless access points operative to provide wireless access to the wired data network over a wireless connection (Abstract; Col 2, lines 1-37; Col 3, lines 36-45); and

a second wireless network (cellular service/licensed) operative to provide telecommunications services on wireless communications frequencies (Abstract; Col 2, lines 19-37), the dual mode digital cordless handset comprising:

means for receiving an Internet Protocol (IP) address (the ability to communicate using IP addresses), when in range of a wireless transmission area of the first (unlicensed) wireless network (Col 13, lines 10-14, 36-40; Col 8, lines 6-19),

means for communicating in a first mode (unregulated/unlicensed) with the one or more wireless access points of the first wireless network via the wireless connection in order to provide the voice and data services over the wired data network (Abstract; Col 2, lines 1-37; Col 3, lines 36-45; Col 4, lines 15-49); and

means for switching from the first wireless network to the second wireless network to communicate in a second mode with the second wireless network in order to provide telecommunication services on the second wireless communication frequencies when out of range of the wireless transmission area of the first wireless network and in range of a wireless transmission area of the second wireless network, (Abstract; Col 2, lines 1-37; Col 3, lines 36-45; Col 4, lines 15-66);

means for determining features provided to the dual mode digital cordless handset (voice and data services provided to subscriber device: Col 3, lines 36-41), wherein determining features provided to the dual mode digital cordless handset comprises comparing the SIM card information (which holds the mobile subscriber identity information, in this case is similar to the IMSI) to the identification information provided by the HLR (Fig. 11; Col 13, line 58 – Col 14, line 39: wherein the subscriber identity IMSI is used to authenticate subscriber for services if authentication value matches with the HLR: Col 14, lines 30-39); and even though Mohammed does not disclose the use of the SIM card, McIntosh does and it would have been obvious to one

ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure of a SIM card in the subscriber device to further roaming (McIntosh:[0028]; [0069]-[0071]).

Mohammed discloses all the particulars of the claim including authentication and authorization (Col 5, lines 35-42; Col 8, 50-53), but does not explicitly disclose means for providing identification information comprising:

means for sending subscriber identity module (SIM) information to the wireless access point to register with the wired data network via the first wireless network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register;

However, McIntosh does disclose means for providing identification information comprising:

means for sending subscriber identity module (SIM) information to the wireless access point to register with the wired data network via the first wireless network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register (SIM: Page 4, [0054]; Page 7, [0068], second to last sentence; Page 7, [0071]; Page 9, [0083]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure to provide authentication security for service.

Furthermore, Mohammed does not disclose the means for operating within restrictions defined for the dual mode digital cordless handset, wherein operating within restrictions defined for the dual mode digital cordless handset comprises determining restrictions on use defined and implemented by an application server.

However, McIntosh does disclose the means for operating within restrictions defined for the dual mode digital cordless handset, wherein operating within restrictions defined for the dual mode digital cordless handset comprises determining restrictions on use defined and implemented by an application server (wherein the user equipment is restricted to be billed on the use of the user equipment based on the access method of service, such as operating within a private or public network: Page 2, [0033]; wherein the public or private network can support certain supplementary services: [0031]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure to provide services within public network and private cellular network for the user device, which is equivalent to Mohammed's licensed and unlicensed wireless communication systems.

Mohammed in view of McIntosh discloses all the particulars of the claim including an authentication process to subscriber before accessing the WLAN, and it is well known in the art that one particular technique to verify certain subscriber is through the use of providing a user name/ID and password to the WLAN. To further prove this fact, examiner would like to point to Sashihara's disclosure of means for providing a user name and password for access via the wireless access point ([0018], [0019], [0023]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Sashihara's disclosure to provide WLAN access to only allowed subscribers.

Regarding claim 2, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the means for switching switches between the first wireless network and the second wireless network without user action (Col 3, lines 41-45).

Regarding claim 4, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the dual mode digital cordless handset further comprises:

means for detecting signaling transmissions of the second wireless network
(Abstract; Col 2, lines 1-37; Col 3, lines 36-45; Col 4, lines 15-66);

means for registering with the second wireless network (Col 4, lines 7-12; Col 10, lines 55-65).

Regarding claim 7, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the digital cordless handset further comprises means for transferring the identification information from the first wireless network to the wired data network where a determination is made regarding what voice and data services to provide based on the identification information (Col 9, lines 25-30).

Regarding claim 8, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein digital cordless handset comprises means for communication with the wired data network via the wireless access point (Fig. 1; Abstract; Col 2, lines 1-37; Col 3, lines 36-45; Col 4, lines 15-66).

Regarding claim 9, Mohammed discloses the dual mode digital cordless handset of claim 8, wherein the dual mode digital cordless handset comprises means for switching between of the wireless access points during voice or data communication (seamless handoff: Col 12, lines 24-35).

Regarding claim 10, Mohammed discloses the dual mode digital cordless handset of claim 9, wherein the means for switching between the wireless access point and another access point switches when the dual mode digital cordless handset exits a wireless transmission area of a first wireless access point and when the dual mode digital cordless handset enters a wireless transmission area of a second wireless access point (seamless handoff: Col 12, lines 24-35).

Regarding claim 11, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the wireless access point is further operative to provide wireless access to the wired data network over the wireless connection comprising an IEEE 802 connection (Col 6, lines 25-26).

Regarding claim 12, Mohammed discloses the dual mode digital cordless handset of claim 1, the second wireless network being operative to provide the telecommunications services on the wireless communications frequencies over a GSM/GPRS connection (Col 11, line 4).

Regarding claim 13, Mohammed discloses a method of providing voice and data services over a wired data network and over a second wireless network, comprising (Abstract; Col 2, lines 19-37):

detecting, at the dual mode digital cordless handset, a first wireless connection (unlicensed) provided by a wireless access point (Fig. 1; Abstract; Col 2, lines 19-37), wherein the wireless access point is wired to the wired data network (Abstract; Fig. 1; Col 2, lines 19-37);

in response to detecting the first wireless connection, receiving an Internet Protocol (IP) address at the dual mode digital cordless handset (communication using IP capability) (Col 13, lines 10-14, 36-40; Col 8, lines 6-19);

providing identification information associated the dual mode digital cordless handset to the wired data network (Col 5, lines 35-42; Col 8, 50-53);

receiving incoming calls directed to the dual mode digital cordless handset and sending outgoing calls from the dual mode digital cordless handset and through the wired data network (Col 3, lines 36-61; Col 9, lines 24-60; Col 10, lines 41-43);

detecting, at the dual mode digital cordless handset, a loss of the first (unlicensed) wireless connection (Col 10, line 55 –Col 11, line 12);

detecting, at the dual mode digital cordless handset, a connection through the second (cellular) wireless network (handoff between unlicensed and licensed: Col 10, line 55 –Col 11, line 12); and

in response to detecting the connection through the second wireless network, receiving incoming calls directed to the dual mode digital cordless handset and sending outgoing calls from the dual mode digital cordless handset through the second wireless network (using cellular/licensed network) (Col 3, lines 30-41; Col 10, line 41-65);

determining features provided to the dual mode digital cordless handset (voice and data services provided to subscriber device: Col 3, lines 36-41), wherein determining features provided to the dual mode digital cordless handset comprises comparing the SIM card information (which holds the mobile subscriber identity information, in this case is similar to the IMSI) to the identification information provided by the HLR (Fig. 11; Col 13, line 58 – Col 14, line 39: wherein the subscriber identity IMSI is used to authenticate subscriber for services if authentication value matches with the HLR: Col 14, lines 30-39); and even though Mohammed does not disclose the use of the SIM card, McIntosh does and it would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure of a SIM card in the subscriber device to further roaming (McIntosh:[0028]; [0069]-[0071]).

Mohammed discloses all the particulars of the claim except wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a use associated with the dual mode digital cordless handset is a subscriber to the wired data network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature application for a user, the identification information being provided by a home location register.

However, McIntosh does disclose wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a use associated with the dual mode digital cordless handset is a subscriber to the wired data network (Abstract; Page 4, [0052]; Page 6, [0064]; Page 9, [0083]), wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature application for a user, the identification information being provided by a home location register (SIM: Page 4, [0054]; Page 7, [0068], second to last sentence; Page 7, [0071]; Page 9, [0083]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure to provide authentication security to provide service.

Furthermore, Mohammed does not disclose the means for operating within restrictions defined for the dual mode digital cordless handset, wherein operating within restrictions defined for the dual mode digital cordless handset comprises determining restrictions on use defined and implemented by an application server.

However, McIntosh does disclose the means for operating within restrictions defined for the dual mode digital cordless handset, wherein operating within restrictions defined for the dual mode digital cordless handset comprises determining restrictions on use defined and implemented by an application server (wherein the user equipment is restricted to be billed on the use of the user equipment based on the access method of service, such as operating within a private or public network: Page 2, [0033]; wherein the public or private network can support certain supplementary services: [0031]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure to provide services within public network and private cellular network for the user device, which is equivalent to Mohammed's licensed and unlicensed wireless communication systems.

Mohammed in view of McIntosh discloses all the particulars of the claim including an authentication process to subscriber before accessing the WLAN, and it is well known in the art that one particular technique to verify certain subscriber is through the use of providing a user name/ID and password to the WLAN. To further prove this fact, examiner would like to point to Sashihara's disclosure of means for providing a user name and password for access via the wireless access point ([0018], [0019], [0023]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Sashihara's disclosure to provide WLAN access to only allowed subscribers.

Regarding claim 14, Mohammed discloses the method of claim 13, further comprising:

after receiving and sending the calls through the second wireless network, detecting, at the dual mode digital cordless handset, the first wireless connection provided by the wireless access point wherein the wireless access point is wired to the wired data network (Abstract; Col 2, lines 1-37; Col 3, lines 36-45); and

receiving incoming calls directed to the dual mode digital cordless handset and setting outgoing calls from the dual mode digital cordless handset through the wired data network (Abstract; Col 2, lines 1-37; Col 3, lines 36-45).

Regarding claim 15, Mohammed discloses the method of Claim 13, further comprising:

determining the voice and data services to provide to the dual mode digital cordless handset over the wired data network based upon the received identification information (Col 5, lines 35-42; Col 8, 50-53).

Regarding claim 16, Mohammed discloses the method of claim 13, wherein receiving the incoming calls directed to the dual mode digital cordless handset and sending the outgoing calls from the dual mode digital cordless handset through the wired data network comprises establishing a voice over Internet protocol (VoIP) session

between the dual mode digital cordless handset and the wired network through the wireless access point (Col 13, lines 12-14).

Regarding claim 19, Mohammed discloses the method of claim 13, wherein detecting, at the dual mode digital cordless handset, the first wireless connection further comprises detecting the first (unlicensed) wireless connection is an IEEE 802 connection (Col 6, lines 25-26).

Regarding claim 20, Mohammed discloses the method of Claim 13, wherein detecting, at the dual mode digital cordless handset, the first wireless connection further comprises detecting the first wireless connection comprising a Bluetooth connection (Col 6, line 25-26).

Regarding claim 21, Mohammed discloses the system of claim 13, wherein providing the voice and data services over the second wireless network comprises providing the voice and data services over the second wireless network over a GSM/GPRS connection (Col 11, line 4).

Regarding claim 33, McIntosh discloses the method of Claim 13, wherein the identification information associated with the dual mode digital cordless handset is stored in a Subscriber Identity Module (SIM) card contained in the dual mode digital cordless handset (Abstract; Page 4, [0052]; Page 6, [0064]; Page 9, [0083]).

Regarding claim 36, Mohammed discloses the method of claim 13 further comprising detecting, at the dual mode digital cordless handset a loss of the first wireless connection when the dual mode digital cordless handset is moved from a transmission range of the wireless access point (handoff to from unlicensed to licensed wireless service Col 10, line 41 – Col 11, line 12).

Regarding claim 37, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the wireless access point is further operative to provide wireless access to the wired data network over the wireless connection comprising an unregulated (unlicensed) wireless connection (such as BLUETOOTH: Col 6, lines 24-27).

Regarding claim 38, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the wireless access point is further operative to provide wireless access to the wired data network over the wireless connection comprising a connection configured to provide wireless service using at least one frequency not assigned to a service provider (such as BLUETOOTH: Col 6, lines 24-27).

Regarding claim 39 Mohammed discloses the method of claim 13, wherein the first wireless connection comprises an unregulated wireless connection such as (BLUETOOTH: Col 6, lines 24-27).

Regarding claim 40, Mohammed discloses the method of claim 13, wherein the first wireless connection comprises a connection configured to provide wireless service using at least one frequency not assigned to a service provider (such as BLUETOOTH: Col 6, lines 24-27).

Regarding claim 43, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the second wireless network is further operative to provide telecommunications services on the wireless communications frequencies comprising regulated wireless communications frequencies (such as cellular/PCS Col 3, lines 30-40).

Regarding claim 44, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the second wireless network is further operative to provide telecommunications services on the wireless communications frequencies comprising frequencies assigned to a service provider (such as cellular/PCS Col 3, lines 30-40).

Regarding claim 45, Mohammed the method of claim 13, the second wireless network being configured to use regulated (licensed) wireless communications frequencies (such as cellular/PCS Col 3, lines 30-40).

Regarding claim 46, Mohammed discloses the method of claim 13, the second wireless network being configured to use communications frequencies assigned to a service provider (such as cellular/PCS Col 3, lines 30-40).

Regarding claim 51, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the wireless access point is further operative to provide voice-over-internet protocol (VOIP) service to the digital cordless handset (Col 13, lines 12-14).

Regarding claim 52, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the dual mode digital cordless handset further comprises means for receiving high-speed data service from the wireless access point (Col 2, lines 20-28).

Regarding claim 53, Mohammed discloses the dual mode digital cordless handset of claim 1, wherein the dual mode digital cordless handset further comprises means for receiving high-speed data service from the wireless access point wherein the received high-speed data service includes multimedia services (voice and data; Col 2, lines 20-28).

Regarding claim 54, Mohammed discloses the dual mode digital cordless handset of claim 1, further comprising a media gateway configured to link at least one of

the following to the wired data network: the first wireless network and the second wireless network (Col 8, lines 32-37).

3. Claims 34, 49, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohammed in view of McIntosh in further view of Kung et al. (US 6373817; hereinafter Kung).

Regarding claim 34, Mohammed in view of McIntosh discloses the method of claim 13, wherein the outgoing calls are sent from the dual mode digital cordless handset through the wired data network (Col 9, lines 24-60), but does not disclose receiving the incoming call comprises receiving the incoming calls are received at the dual mode digital cordless handset through the wired data network using a Session Initiation Protocol (SIP).

However, Kung does disclose receiving the incoming call comprises receiving the incoming calls are received at the dual mode digital cordless handset through the wired data network using a Session Initiation Protocol (SIP) (Col 13, line 27-41; Col 14, line 20).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Kung's disclosure to provide communication and connectivity to conference calls within an IP voice environment.

Regarding claim 49, Mohammed in view of McIntosh discloses plurality of gateways with modems and routers but does not distinctively disclose the dual mode digital cordless handset of claim 1, wherein the wireless access point is wired to the wired data network through a broadband residential gateway comprising a broadband modem and a router, the broadband residential gateway being configured to enable another wireless access point to connect to the wired data network.

Even though a broadband residential gateway is well known in the art, Kung also discloses wherein the wireless access point is wired to the wired data network through a broadband residential gateway comprising a broadband modem and a router, the broadband residential gateway being configured to enable another wireless access point to connect to the wired data network (Col 24, lines 46-57).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Kung's disclosure to provide routing functionality.

Regarding claim 50, Mohammed in view of McIntosh discloses plurality of gateways with modems and routers but does not distinctively disclose the system of claim 13, wherein the wireless access point is wired to the wired data network through a broadband residential gateway comprising a broadband modem and a router, the broadband residential gateway being configured to enable another wireless access point to connect to the wired data network.

Even though a broadband residential gateway is well known in the art, Kung also discloses wherein the wireless access point is wired to the wired data network through a

broadband residential gateway comprising a broadband modem and a router, the broadband residential gateway being configured to enable another wireless access point to connect to the wired data network (Col 24, lines 46-57).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Kung's disclosure to provide routing functionality.

4. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohammed in view of McIntosh in further view of Kung and in further view of Suhail et al. (hereinafter Suhail US 20040114603).

Regarding claim 35, Mohammed in view of McIntosh further view of Kung discloses all the particulars of the claim except for the method of claim 34, wherein the SIP is stored at the dual mode digital cordless handset.

Even though SIP-enabled phones are well known in the art, and therefore Suhail does disclose the SIP is stored at the dual mode digital cordless handset (Abstract; Page 1, [0021]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Suhail's disclosure to provide communication and connectivity to conference calls within an IP voice environment.

5. Claim 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohammed in view of McIntosh in further view of Sinha (US 6970474).

Regarding claim 17, Mohammed in view McIntosh discloses all the particulars of the claim except wherein receiving the incoming calls directed to the dual mode digital cordless handset comprises:

detecting an IP address associated with a telephone number to which the incoming calls are directed; and

if the IP address associated with the telephone number to which the incoming calls are directed matches the IP address received at the dual mode digital cordless handset, then establishing the VoIP session with the dual mode digital cordless handset.

Processing incoming and outgoing calls with a VoIP enabled phone is well known in the art; Sinha discloses the limitations of detecting an IP address associated with a telephone number to which the incoming calls are directed (Col 7, lines 25-40); and

if the IP address associated with the telephone number to which the incoming calls are directed matches the IP address received at the dual mode digital cordless handset, then establishing the VoIP session with the dual mode digital cordless handset (Col 7, lines 25-40).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Sinha's disclosure within the VoIP-enabled environment Mohammed, to provide VOIP communication and connectivity.

Regarding claim 18, Mohammed in view McIntosh discloses a VoIP-enabled system/network (Col 13, lines 13-14) and all the particulars of the claim except for the

method of claim 16, wherein sending the outgoing calls from the dual mode digital cordless handset comprises:

establishing the VoIP session between the dual mode digital cordless handset and the wired data network to receive telephone numbers associated with the outgoing calls at the wired data network; and

completing the outgoing calls to parties associated with the telephone numbers.

However, Sinha does disclose establishing the VoIP session between the dual mode digital cordless handset and the wired data network to receive telephone numbers associated with the outgoing calls at the wired data network (Abstract; Col 2, lines 34-45; Col 4, line 51 – Col 5, line 17; Col 7, lines 19-25); and

completing the outgoing calls to parties associated with the telephone numbers (establishing communication) (Abstract; Col 2, lines 34-45; Col 4, line 51 – Col 5, line 17; Col 7, lines 19-25)

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Sinha's disclosure within the VoIP-enabled environment of Mohammed, to provide VOIP communication and connectivity.

6. Claims 22, 23, 25-32, 41, 42, 47, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rautiola in view of Mohammed in view of McIntosh in further view of Sashihara (US 20020157007).

Regarding claim 22, Rautiola discloses a system for providing voice and data services over a wired data network and over a second wireless network, the system comprising (Col 1, lines 5-9; Col 2, lines 54-67; Col 6, lines 31-34; Fig. 2):

a broadband residential gateway comprising:

a home location register, the home location register operative to maintain identification information used to verify the legitimacy of an attempt to access a service and feature applicable for a user and determine features to be provided to a dual mode digital cordless handset (well known capability of HLR: Col 6, line 42, even for authentication to provide services as disclosed in Mohammed: Col 14, lines 27-39)

a first network device operative to communicate with the wired data network (Col 3, lines 60-65), a second network (Col 3, lines 29-38; Col 4, lines 27-31) operative to provide a communications link to one or more wired network devices over a wired connection, and a wireless access point (Col 4, lines 55-58) operative to provide wireless access to the wired data network over a first (Col 3, lines 20; Col 6, lines 37-39) wireless connection;

a second wireless network operative to provide telecommunications services on wireless communications frequencies (Col 4, lines 14-26); and

a dual mode digital cordless handset operative to,
communicate in a first mode with the wireless access point via the first wireless connection in order to provide the voice and data services over the wired data network (Col 6, lines 34-50); and

and when out of range of the wireless transmission area of the wireless access point and in range of a wireless transmission area of the second wireless network, switch from the wireless network to the second wireless access point to the second wireless network to communicate in a second mode with the second wireless network in order to provide the voice and data services over the second wireless network (Col 2, lines 54-67; Col 6, lines 31-40).

Rautiola discloses an IP communication-enabled environment (Col 6, line 41; Col 7, line 45; Fig. 2,3,5-11, 13, 14) and all the particulars of the claim but is unclear on the limitations of one or more dual mode digital cordless handsets operative to

receive an Internet Protocol (IP) address, when in range of a wireless transmission area of the wireless access point network; and

provide identification information to the wired data network via the wireless access point network.

However, Mohammed discloses the limitations that one or more dual mode digital cordless handsets operative to

receive an Internet Protocol (IP) address (the ability to communicate using IP addresses), when in range of a wireless transmission area of the wireless access point network (Col 13, lines 10-14, 36-40; Col 8, lines 6-19);

provide identification information to the wired data network via the wireless access point network (Col 5, lines 35-42; Col 8, 50-53).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Mohammed disclosure to provide authentication and IP connectivity for handover between regulate and systems.

Furthermore, Rautiola in view of Mohammed is unclear about wherein determining features provided to the dual mode digital cordless handset, wherein determining features provided to the dual mode digital cordless handset comprises comparing the SIM card information (which holds the mobile subscriber identity information, in this case is similar to the IMSI) to the identification information provided by the HLR;

However, Mohammed does disclose determining features provided to the dual mode digital cordless handset (voice and data services provided to subscriber device: Col 3, lines 36-41), wherein determining features provided to the dual mode digital cordless handset comprises comparing the SIM card information (which holds the mobile subscriber identity information, in this case is similar to the IMSI) to the identification information provided by the HLR (Fig. 11; Col 13, line 58 – Col 14, line 39: wherein the subscriber identity IMSI is used to authenticate subscriber for services if authentication value matches with the HLR: Col 14, lines 30-39); and even though Mohammed does not disclose the use of the SIM card, McIntosh does and it would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure of a SIM card in the subscriber device to further roaming (McIntosh:[0028]; [0069]-[0071]).

Rautiola in view of Mohammed discloses all the particulars of the claim except for wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a user associated with the dual mode digital cordless handset is a subscriber to the wired data network.

However, McIntosh does disclose wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a user associated with the dual mode digital cordless handset is a subscriber to the wired data network (Abstract; Page 4, [0052]; Page 6, [0064]; Page 9, [0083])

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure to provide authentication security for service.

Rautiola in view of Mohammed is unclear about operating within restrictions defined for the dual mode digital cordless handset, wherein operating within restrictions defined for the dual mode digital cordless handset comprises determining restrictions on use defined and implemented by an application server.

However, McIntosh does disclose the means for operating within restrictions defined for the dual mode digital cordless handset, wherein operating within restrictions defined for the dual mode digital cordless handset comprises determining restrictions on use defined and implemented by an application server (wherein the user equipment is

restricted to be billed on the use of the user equipment based on the access method of service, such as operating within a private or public network: Page 2, [0033]; wherein the public or private network can support certain supplementary services: [0031]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate McIntosh's disclosure to provide services within public network and private cellular network for the user device, which is equivalent to the dual mode nature of the wireless device.

Rautiola in view of Mohammed in further view of McIntosh discloses all the particulars of the claim including an authentication process to subscriber before accessing the WLAN, and it is well known in the art that one particular technique to verify certain subscriber is through the use of providing a user name/ID and password to the WLAN. To further prove this fact, examiner would like to point to Sashihara's disclosure of means for providing a user name and password for access via the wireless access point ([0018], [0019], [0023]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Sashihara's disclosure to provide WLAN access to only allowed subscribers.

Regarding claim 23, Rautiola discloses the system of claim 22, further comprising one or more digital wired handset operative to communicate with the wired data network in order to provide the voice and data services (Col 6, lines 31-47).

Regarding claim 25, Rautiola discloses the system of claim 23, wherein the wired data network is operative to generate a telephone call directed toward the broadband residential gateway and wherein the telephone call may be answered on the dual mode digital cordless handset or any of the digital wired handset (Col 11, lines 54-65; Fig. 7).

Regarding claim 26, Rautiola discloses the system of claim 23, wherein the broadband residential gateway is operative to generate a telephone call directed toward the wired data network and wherein the telephone call may be initiated on the dual mode digital cordless handset or any of the digital wired handset (Col 11, lines 54-65; Fig. 7).

Regarding claim 27, Rautiola discloses the system of claim 23, wherein the system further comprises a directory information database and wherein the dual mode digital cordless handset or the digital wired handset are operative to access directory information provided by the directory information database (Col 9, lines 3-7).

Regarding claim 28, Rautiola discloses the system of claim 22, wherein the dual mode digital cordless handset transmits a user identifier to the wired network and wherein the system further comprises a restriction database of the wired network that applies rules to telephone calls of the dual mode digital cordless handset based on the user of the dual mode digital cordless handset (Col 8, lines 50-67).

Regarding claim 29, Rautiola discloses the system of claim 22, wherein the system further comprises a web interface at a personal computer linked to the wired network, wherein the web interface provides for entry of administrative information for providing the voice and data services over the wired data network (Col 3, lines 26-27; Col 4, line 50; Fig. 4).

Regarding claim 30, Mohammed discloses the method of claim 22, wherein the first (unlicensed) wireless connection comprises an IEEE 802.11b connection (Col 6, lines 25-26).

Regarding claim 31, Rautiola discloses the system of Claim 22, wherein the first wireless connection comprises a Bluetooth connection (Col 4, line 57).

Regarding claim 32, Rautiola disclose the system of Claim 22, further comprising the second wireless network being further operative to provide the telecommunications services on the wireless communications frequencies over a GSM/GPRS connection (Col 4, line 20).

Regarding claim 41, Rautiola discloses the system of claim 22, wherein the first wireless connection comprises an unregulated wireless connection (such as BLUETOOTH: Col 4, line 57).

Regarding claim 42, Rautiola discloses the system of claim 22, wherein the first wireless connection comprises a connection configured to provide wireless service using at least one frequency not assigned to a service provider (such as BLUETOOTH: Col 4, line 57).

Regarding claim 47, Mohammed discloses the system of claim 22, wherein the wireless communications frequencies comprise regulated wireless communications frequencies (such as cellular/PCS Col 3, lines 30-40).

Regarding claim 48, Mohammed discloses the system of claim 22, wherein the wireless communications frequencies comprise frequencies assigned to a service provider (such as cellular/PCS Col 3, lines 30-40).

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rautiola in view of Mohammed in further view of McIntosh in further view of Lin et al. (US 6868072; hereinafter Lin).

Regarding claim 24, Rautiola in view of Mohammed discloses all the particulars of the system except the system of claim 22, wherein the wired connection comprises a Home Phoneline Network Alliance (HPNA) connection.

HPNA connection is well known in the art, and Lin also discloses HPNA connections within a network architecture (Col 5).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Lin's disclosure to provide connectivity.

8. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohammed in view of Messiet (US 5875404).

Regarding claim 56, Mohammed discloses a dual mode wireless device operative to communicate with a first wireless network including at least one wireless access point wired to at least one wired data network, and a second wireless operative at wireless communications frequencies, the dual mode wireless device (Abstract) comprising:

means for receiving an Internet Protocol (IP) address (the ability to communicate using IP addresses), when in range of a wireless transmission area of the first (unlicensed) wireless network (Col 13, lines 10-14, 36-40; Col 8, lines 6-19); and

means for communicating in a first mode with the at least one wireless access point of the first wireless network in order to provide voice and data services associated with the at least one wired data network (Col 3, lines 49-55; unlicensed network connected with PSTN); and

means for switching from the first wireless network to the second wireless network to communicate in a second mode with the second wireless network in order to provide telecommunications services at the wireless communications frequencies when out of wireless transmission range of the first wireless network and in transmission range of the second wireless network (Fig. 6; Col, 8, line 64 – Col 9, line 15: the transition from licensed and unlicensed wireless networks).

Mohammed discloses all the particulars of the claim but is unclear about wherein the means for receiving the IP address comprises at least one of the following:

means for broadcasting a medium access control (MAC) address associated with the dual mode wireless device, and

means for providing identification information comprising means for communicating subscriber identity module (SIM) information, the SIM information being used to determine services and restrictions applied to the dual mode wireless device.

However, Messiet does disclose the means for providing identification information comprising means for communicating subscriber identity module (SIM) information, the SIM information being used to determine services and restrictions applied to the dual mode wireless device (Col 2, lines 38-47: wherein the SIM card is defined to a predefined services and possibly having some service restrictions).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Messiet's disclosure to provide specified communication services to subscriber.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUCK HUYNH whose telephone number is (571)272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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